

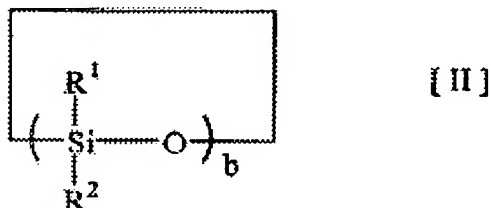
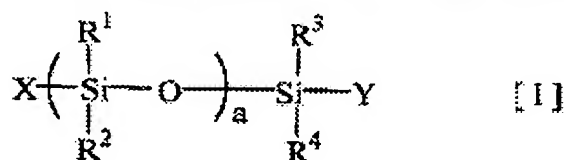
Art Unit: 1648

Prel. Amdt. 04/17/02

CETHOMAS (02/04/05)

Claims 1-11 (Original)

1. A carrier for immunoassay which comprises, at least on surface thereof, a silicon compound of the following Formula [I] and/or [II].



(In Formulae [I] and [II], R^1 to R^4 , X and Y independently represent hydrogen or substituted or non-substituted organic group, a is an integer of 0 to 5000, and b is an integer of 3 to 20).

2. The carrier for immunoassay according to claim 1, wherein in formula [I] or [II], R^1 to R^4 independently represent hydrogen, $\text{C}_1\text{-C}_6$ alkyl, $\text{C}_1\text{-C}_6$ alkoxy or phenyl, and X and Y independently represent hydrogen, silanol, $\text{C}_1\text{-C}_6$ alkoxy or amino.

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3. The carrier for immunoassay according to claim 1, wherein said silicon compound is a dialkylpolysiloxane.
4. The carrier for immunoassay according to claim 3, wherein said dialkylpolysiloxane is dimethylpolysiloxane.
5. The carrier for immunoassay according to claim 1, wherein said silicon compound is represented by said Formula [I] wherein a is 0; X , Y , R^3 and R^4 independently represent hydrogen or an organic group, and at least one of them is a hydrophobic organic group.
6. The carrier for immunoassay according to claim 5, wherein said silicon compound is a hydrophobic silane represented by Formula [I] wherein X and Y independently represent hydrogen, C_1 - C_6 alkyl, or C_1 - C_6 alkoxy; R^3 represents C_2 - C_{30} alkyl, C_2 - C_{30} alkenyl, C_2 - C_{30} alkoxy, phenyl or substituted phenyl; R^4 represents C_1 - C_{30} alkyl or C_1 - C_{30} alkoxy.
7. The carrier for immunoassay according to claim 6, wherein said hydrophobic silane is alkyltrialkoxysilane, vinyltrialkoxysilane or phenyltrialkoxysilane.
8. The carrier for immunoassay according to claim 7, wherein said alkyltrialkoxysilane is octadecyltriethoxysilane.
9. The carrier for immunoassay according to any one of claims 1 to 8, wherein said carrier comprises a substrate coated with said silicon compound.
10. The carrier for immunoassay according to claim 9, wherein said substrate is glass, quartz or ceramics.
11. The carrier for immunoassay according to claim 10, wherein said substrate is glass fiber.

12. (Amended) The carrier for immunoassay according to [any one of] claim[s] 9 [to 11], wherein said substrate is porous and said surface of said carrier is porous.

Claims 13-14 (Original)

13. The carrier for immunoassay according to claim 12, wherein said substrate is in the form of membrane made of glass fibers.

14. A solid phase for immunoassay obtainable by binding an immunoreactive substance to a carrier for immunoassay which comprises, at least on surface thereof, a hydrophobic material, and blocking the resulting carrier by coating exposed area of said hydrophobic material with an amphipathic substance.

15. (Amended) The solid phase for immunoassay [according to claim 14] obtainable by binding an immunoactive substrate to a solid phase for immunoassay obtainable by binding an immunoreactive substance to a carrier for immunoassay which comprises, at least on surface thereof, a hydrophobic material, and blocking the resulting carrier by coating exposed area of said hydrophobic material with an amphipathic substance, wherein said carrier for immunoassay is the carrier for immunoassay according to any one of claims 1 to [13] 8.

16. (Amended) The solid phase for immunoassay according to claim [14 or] 15, wherein said amphipathic substance is a surfactant.

Claim 17 (Original)

17. The solid phase for immunoassay according to claim 16, wherein said surfactant is a nonionic surfactant.